

1. A luminaire assembly, comprising:
  - an integral first housing member including a top panel and a side panel;
  - an integral second housing member including a bottom panel and a side panel, wherein said first and second housing members are operatively connected to form a ballast housing having a pair of openings at opposite ends thereof;
  - a pair of end panels operatively connected to said first and second housing members for covering the openings formed at the opposite ends of said ballast housing; and
  - an optical assembly supported below said ballast housing and operable to distribute light emanating therefrom in an area to be illuminated.
2. The luminaire assembly of claim 1 wherein each of said end panels is integral with one of said first and second housing members.
3. The luminaire assembly of claim 1 wherein said each of said first and second housing members is fabricated of a single metal sheet.

4. The luminaire assembly of claim 1 wherein said first and second housing members are fabricated substantially identical in configuration.

5. The luminaire assembly of claim 1 wherein said top panel  
5 is joined to said side panel through a fold line whereby said top panel and side panel are foldable relative to each other by hand.

6. The luminaire assembly of claim 5 wherein said bottom  
panel is joined to said side panel through a fold line whereby said  
bottom panel and side panel are foldable relative to each other by  
10 hand.

7. The luminaire assembly of claim 6 wherein each of said fold lines includes a plurality of openings formed through the thickness of said first and second housing members.

8. The luminaire assembly of claim 1 wherein each of said  
15 top and bottom panels includes a substantially planar wall and a pair of spaced side walls extending away from said planar wall along opposite side margins thereof.

9. The luminaire assembly of claim 8 wherein each of said top and bottom panels includes a pair of flange walls, wherein each flange wall extends outwardly from one of said side walls.
10. The luminaire assembly of claim 8 wherein each of said top and bottom panels includes a pair of spaced end walls extending away from said planar wall along opposite end margins thereof.
11. The luminaire assembly of claim 10 wherein each pair of spaced end walls includes at least one opening formed through the thickness thereof.
12. The luminaire assembly of claim 11 wherein each of said end panels includes at least one tab member adapted to be received in said openings formed in said end walls.
13. The luminaire assembly of claim 12 further including at least one fastener extending through each end panel and into one of said pair of end walls.

14. The luminaire assembly of claim 8 wherein each of said side panels is adapted to lie in a plane substantially parallel to said substantially planar wall of said top and bottom panels prior to assembly of said ballast housing.

5 15. The luminaire assembly of claim 14 wherein said first and second housing members are nestable prior to assembly of said ballast housing.

16. An assembly for use in a luminaire, comprising:

a ballast housing;

a fastening member operatively connected to said ballast housing; and

5 a wiring box engageable with an upper end of said ballast housing for pivotally supporting said ballast housing between inoperative and operative positions, said wiring box including a flange member adapted to engage said fastening member when it is fully fastened to support said ballast housing in the operative position.

10 17. The assembly of claim 16 wherein said flange member includes a notch adapted to slidably receive said fastening member before it is fully fastened.

18. The assembly of claim 16 wherein said wiring box includes a top panel, a pair of side panels, and a pair of end panels  
15 forming an opening at a lower end of said wiring box.

19. The assembly of claim 18 wherein said wiring box is fabricated of single metal sheet.

20. The assembly of claim 16 wherein said ballast housing includes at least one opening formed through the thickness thereof adjacent an upper end of said ballast housing.

21. The assembly of claim 20 wherein said wiring box  
5 includes at least one tab member formed adjacent a lower end thereof for insertion in said opening formed adjacent the upper end of said ballast housing to provide a pivotal connection between said wiring box and said ballast housing.

22. The assembly of claim 16 including a first wiring box  
10 engageable with an upper end of said ballast housing for pivotally supporting said ballast housing between inoperative and operative positions, and a second wiring box engageable with an upper end of said first wiring box, whereby said first wiring box spaces said second wiring box from said ballast housing.

15 23. The assembly of claim 22 wherein said first wiring box includes at least one opening formed through the thickness thereof adjacent an upper end of said first wiring box.

24. The assembly of claim 23 wherein said second wiring box includes at least one tab member formed adjacent a lower end thereof for insertion in said opening formed adjacent the upper end of said first wiring box.

- 5 25. The assembly of claim 22 wherein said first and second wiring boxes are fabricated substantially identical in configuration.

26. An assembly for use in a luminaire, comprising:

a ballast housing including at least one opening formed through the thickness thereof adjacent an upper end of said ballast housing; and

5 a wiring box including at least one tab member formed adjacent a lower end thereof for insertion in said opening of said ballast housing for pivotally supporting said ballast housing between inoperative and operative positions.

27. The assembly of claim 26 wherein said ballast housing  
10 includes a fastening member operatively connected to said ballast housing.

28. The assembly of claim 27 wherein said wiring box  
includes a flange member adapted to engage said fastening member when it is fully fastened to support said ballast housing in the operative  
15 position.



29. The assembly of claim 28 wherein said flange member includes a notch adapted to slidably receive said fastening member before it is fully fastened.

30. The assembly of claim 26 wherein said wiring box  
5 includes a top panel, a pair of side panels, and a pair of end panels forming an opening at a lower end of said wiring box.

31. An assembly for use in a luminaire, comprising:

a ballast housing;

a wiring box mounted to an upper end of said ballast housing, said wiring box including a keyhole opening formed on an

5 upper end thereof having a generally circular aperture and a pair of notches extending radially outwardly from said circular aperture; and

a connector mounted to the upper end of said wiring box and adapted to be engaged with a support member for supporting the wiring box, said connector including an upper pair of tabs extending

10 radially outwardly therefrom and a lower pair of tabs spaced axially from said upper pair of tabs, and extending radially outwardly from said connector,

whereby said connector is operable to be inserted through said keyhole opening with said lower pair of tabs extending through

15 said pair of notches and, upon rotation of said connector, said upper pair of tabs covering said pair of notches formed on the upper end of said wiring box and said lower pair of tabs underlying said upper end of said wiring box angularly offset from said pair of notches to support said wiring box from said connector.

32. The assembly of claim 31 wherein one of said pair of notches is formed diametrically opposite the other of said pair of notches.

33. The assembly of claim 32 wherein one of said upper pair  
5 of tabs is formed diametrically opposite the other of said upper pair of tabs.

34. The assembly of claim 33 wherein one of said lower pair of tabs is formed diametrically opposite the other of said lower pair of tabs.

10 35. The assembly of claim 34 wherein said upper pair of tabs is angularly offset from said lower pair of tabs.

36. The assembly of claim 31 further including a pair of openings formed on the upper end of the wiring box, wherein said pair of openings is angularly offset from a longitudinal axis of said keyhole  
15 opening.

37. The assembly of claim 36 wherein said lower pair of tabs include threaded bores for receiving a pair of fasteners extending through the pair of openings formed on the upper end of said wiring box when said lower pair of tabs and said pair of openings are aligned upon rotation of said connector relative to said wiring box.
38. The assembly of claim 31 wherein said connector includes a bore extending axially therethrough.
39. The assembly of claim 38 wherein said bore is at least partially threaded.
40. The assembly of claim 35 wherein said upper pair of tabs is angularly offset about  $45^\circ$  from said lower pair of tabs.
41. The assembly of claim 36 wherein said pair of openings formed on the upper end of the wiring box is angularly offset about  $45^\circ$  from the longitudinal axis of said keyhole opening.

42. An assembly for use in a luminaire, comprising:  
a ballast housing;  
a wiring box mounted to an upper end of said ballast housing; and

5 a hook member having a lower end supporting an upper end of said wiring box and an upper end adapted to be supported by a support member, the upper end of said hook member including an elongated opening for receiving the support member therethrough and a bendable tab operable to at least partially close said elongated  
10 opening in a closed position of said bendable tab.

43. The assembly of claim 42 wherein said hook member includes a support flange formed on the lower end thereof and an integral hook-forming flange formed on the upper end thereof extending generally transverse to said support flange.

15 44. The assembly of claim 42 wherein said hook member includes a tool-receiving slot formed adjacent said bendable tab for receiving a tool to bend said tab to the closed position.

45. The assembly of claim 43 wherein said wiring box includes an elongated slot formed on the upper end thereof for receiving said support flange within said wiring box and permitting said support flange to extend generally parallel to the upper end of said wiring box with said hook-forming flange extending generally transverse to the upper end of said wiring box.

46. The assembly of claim 45 further including a fastener extending through the upper end of said wiring box and into said support flange.

47. A luminaire assembly, comprising:

a ballast housing including a top panel, a bottom panel,  
and a pair of opposite sides panels, each of said side panels including  
a plurality of spaced openings formed therein;

5 a pair of elongated support arms depending from said  
ballast housing, each of said support arms including an upper end  
releasably engageable with said openings formed in said side panels  
and a lower end terminating in a support flange; and

10 an optical assembly including a pair of upstanding  
mounting flanges adapted to releasably engage with said support  
flanges, whereby said optical assembly is supported below said ballast  
housing upon engagement of said support flanges with said mounting  
flanges.

48. The luminaire assembly of claim 47 wherein said optical  
15 assembly includes one of a reflector and a refractor, a light socket  
extending into said one of a reflector and a refractor, and a light source  
mounted in said light socket.

49. The luminaire assembly of claim 48 further including a  
lens mounted on a lower end of said one of a reflector and a refractor.

50. The luminaire assembly of claim 47 wherein each support arm includes an offset flange formed on the upper end thereof for insertion in one of said openings formed in the side panels.

5 51. The luminaire assembly of claim 50 wherein said support flange formed at the lower end of each support arm extends generally transverse to said support arm.

10 52. The luminaire assembly of claim 51 wherein each upstanding mounting flange of said optical assembly includes an opening formed therethrough adapted to receive said support flange of said support arms.

53. The luminaire assembly of claim 52 wherein each of said support flanges includes a protuberance adapted to releasably engage with said openings formed in said mounting flanges.



54. A luminaire assembly, comprising:  
a ballast housing;  
an optical assembly supported by said ballast housing;

and

5 a lens supported on a lower end of said optical assembly  
and biased toward and into releasable engagement with said optical  
assembly, said lens being operable to be manually pulled away from  
the lower end of said optical assembly in a direction generally parallel  
to the vertical axis of said optical assembly thereby establishing  
10 clearance between said lens and the lower end of said optical  
assembly, and simultaneously pivoting relative to said optical assembly  
upon sufficient clearance being established between said lens and the  
lower end of said optical assembly, to permit relamping of said optical  
assembly without detaching said lens from said optical assembly.

15 55. The luminaire assembly of claim 54 including a spring  
mechanism operatively connected to said optical assembly and said  
lens for biasing said lens toward said optical assembly.

56. The luminaire assembly of claim 55 including a grasping member operatively connected to said spring mechanism and said lens to permit said lens to be manually pulled away from the lower end of said optical assembly.

5 57. The luminaire assembly of claim 56 wherein said grasping member extends through said lens.

58. The luminaire assembly of claim 57 wherein a portion of said grasping member is generally aligned with the vertical axis of said optical assembly.

10 59. The luminaire assembly of claim 57 wherein a portion of said grasping member is offset from the vertical axis of said optical assembly.

60. A luminaire assembly, comprising:

a ballast housing;

an optical assembly supported by said ballast housing;

a spring mechanism operatively connected to said optical

5 assembly;

a lens adapted to be supported on a lower end of said  
optical assembly; and

a grasping member operatively connected to said spring  
mechanism and said lens, wherein said lens is biased toward and into  
10 releasable engagement with said optical assembly by cooperation of  
said spring mechanism and said grasping member, and further wherein  
said lens is operable to be manually pulled away from the lower end of  
said optical assembly in a direction generally parallel to the vertical axis  
of said optical assembly thereby establishing clearance between said  
15 lens and the lower end of said optical assembly and simultaneously  
pivoting relative to said optical assembly upon sufficient clearance  
being established between said lens and the lower end of said optical  
assembly to permit relamping of said optical assembly.

61. The luminaire assembly of claim 60 wherein said grasping  
20 member extends through said lens.

62. The luminaire assembly of claim 61 wherein a portion of said grasping member is generally aligned with the vertical axis of said optical assembly.

5 63. The luminaire assembly of claim 62 wherein said grasping member is connected to said spring mechanism at a position offset from the vertical axis of said optical assembly.

64. The luminaire assembly of claim 61 wherein a portion of said grasping member is offset from the vertical axis of said optical assembly.

10 65. The luminaire assembly of claim 64 wherein said grasping member is connected to said spring mechanism at a position offset from the vertical axis of said optical assembly.

66. A method of making a luminaire assembly, comprising:  
providing a first housing member including an integral top  
panel and a side panel;

5 providing a second housing member including an integral  
bottom panel and a side panel;

operatively connecting the first and second housing  
members to form a ballast housing having a pair of openings at  
opposite ends thereof, with the side panel of the first housing member  
operatively connected to bottom panel of the second housing member,  
10 and with the side panel of the second housing member operatively  
connected to the top panel of the first housing member; and

supporting an optical assembly from the ballast housing  
for distributing light emanating therefrom in a desired pattern on a  
surface to be illuminated.

15 67. The method of claim 66 further including the steps of:  
providing a pair of end panels; and  
operatively connecting the pair of end panels to the first  
and second housing panels for covering the openings formed at the  
opposite ends of the ballast housing.

68. The method of claim 66 further including the step of die cutting each of the first and second housing members from a single metal sheet.

69. The method of claim 68 wherein said die cutting step  
5 includes die cutting the first and second housing members to be shaped substantially identical.

70. The method of claim 66 wherein the top panel is joined to the side panel through a fold line whereby the top panel and side panel are foldable relative to each other by hand.

10 71. The method of claim 66 wherein the bottom panel is joined to the side panel through a fold line whereby the bottom panel and side panel are foldable relative to each other by hand.

72. The method of claim 66 further including the step of nesting the first and second housing members prior to assembly of the  
15 ballast housing.

73. The method of claim 66 further including the step of suspending the optical assembly from the ballast housing through a pair of support arms that releasably engage each of the side panels and an upper end of the optical assembly.

5 74. The method of claim 66 further including the step of mounting a lens to a lower end of the optical assembly.

75. The method of claim 66 further including the step of pivotally mounting a first wiring box to the top panel.

10 76. The method of claim 75 further including the step of mounting a second wiring box to an upper end of the first wiring box.

77. The method of claim 75 further including the step of mounting a hook member to an upper end of the first wiring box.

78. The method of claim 77 further including the step of providing an elongated slot in the hook member for receiving a support member therethrough and a bendable tab operable to substantially close peripheral edges of the elongated slot in a closed position of the bendable tab.

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79. A method of making a luminaire assembly, comprising:
- providing a ballast housing;
- supporting an optical assembly from the ballast housing
- for distributing emanating therefrom in a desired pattern on the surface
- 5 to be illuminated;
- operatively connecting a lens to a lower end of the optical
- assembly; and
- biasing the lens toward and into releasable engagement
- with the optical assembly;
- 10 wherein the lens is operable to be manually pulled away
- from the lower end of the optical assembly in a direction generally
- parallel to the vertical axis of the optical assembly, thereby establishing
- clearance between the lens and the lower end of the optical assembly,
- and simultaneously pivoting relative to the optical assembly upon
- 15 sufficient clearance being established between the lens and the lower
- end of the optical assembly, to permit relamping of the optical
- assembly.